## MONTHLY NOTICES

OF THE

## ROYAL ASTRONOMICAL SOCIETY.

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No. 1

## E. B. Knobel, President, in the Chair.

The Rev. James Barnes Brearley, M.A., F.R.G.S., St. James's Church, Oldham, Lancashire;

Herbert Hancock, M.A., F.R. Met. Soc., Bancroft's School, Woodford, Essex;

Thomas Torrens Knowles, M.A., Royal Grammar School, Lancaster;

Alfred Thomas Odell-Sorrell, St. Mary's Grove, Chiswick, W.; Edward Stroud, Prisca Coborn Foundation School, Tredegar Square, E.;

John Tatlock, jun., M.A., New York, U.S.A.,

were balloted for and duly elected Fellows of the Society.

Professor W. L. Elkin, Yale College, New Haven, Conn., U.S.A.;

Professor J. C. Kapteyn, Observatory, Groningen, Holland; Professor Hugo Seeliger, Observatory, Munich, Bavaria; Dr. Hermann Struve, Observatory, Pulkowa, Russia,

were balloted for and duly elected Associates of the Society.

The following candidates were proposed for election as Fellows of the Society, the names of the proposers from personal knowledge being appended:—

Joseph Ibbitson Berry, 20, Alwyne Road, Canonbury, N. (proposed by W. S. B. Woolhouse);

Martin Brendel, Ph.D., Privat-docent of the University, Greifswald, Germany (proposed by H. H. Turner);

Ernest Gould Dixon, Teacher and Graduate of the College of Preceptors, 78, Alderney Street, S.W. (proposed by John Newton);

Harold Dennis Taylor, Optical Manager to Messrs. T. Cooke and Sons, 20, Bootham Terrace, York (proposed by Albert Taylor).

Two hundred and ten presents were announced as having been received since the last meeting, including, amongst others,

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part of a series of photographic portraits of the Presidents of the Society, made and presented by Mr. W. Schooling; C. Flammarion, La planète Mars, presented by the author; Barlow and Bryan, Elementary Mathematical Astronomy, presented by Mr. W. T. Lynn; A. Guillemin, Autres Mondes, presented by the author; Catalogue of Proper-motion Stars, by J. G. Porter. presented by the Cincinnati Observatory; Oxford University Observatory, Researches in Stellar Parallax by the aid of Photography, Part 2, presented by the Observatory; H. Gyldén, Nouvelles recherches sur les séries employées dans les théories des Planètes, presented by the author; E. L. Trouvelot, Drawing of a portion of the Milky Way, presented by M. Trouvelot (per Mr. A. Marth); Lick Observatory, Photographs of the Moon and Jupiter (enlarged positives on glass), presented by the Observatory; Sydney Observatory, Photographs of portions of the Moon and of the region surrounding  $\eta$  Argûs (enlargements on paper), presented by Mr. H. C. Russell; Astronomische Gesellschaft, Catalog, Zone + 50° bis 55° (Cambridge, Mass.), presented by the Society; Specola Vaticana, Pubblicazioni I. and II., presented by the Observatory; von Kuffner'sche Sternwarte, Publicationen, Band II., presented by the Observatory; J. Bossert, Catalogue de 3950 étoiles (supplément à l'Histoire Céleste de Lalande), presented by the author.

On the Variation of Latitude, as indicated by Recent Observations at the Royal Observatory, Greenwich. By W. G. Thackeray and H. H. Turner, M.A., B.Sc.

The publication of a Star Catalogue at Greenwich has generally been an occasion for discussing the systematic errors of that and of previous catalogues, from comparisons inter se, or with catalogues of other observatories. The last Greenwich Catalogue (Ten-Year, 1880) is, for instance, readily comparable with Stone's Cape Catalogue, 1880, and the comparison has an important bearing on the determination of refraction. It has, indeed, already been made, but the discussion is not quite complete, though it is hoped soon to publish the results. But a somewhat new departure has been made in connection with the Ten-Year Catalogue, in the comparison of the N.P.D.s for different years The investigation was, from the nature of the with the mean. case, limited to those stars which had been well observed at different epochs throughout the ten years; and in practice only those stars were included which had been observed in at least five years out of the ten. For such stars the annual means for N.P.D., formed in the computation sheets during the process of reduction to 18800, were compared with the finally adopted result for N.P.D., and the excesses tabulated under the respective years, with a view to the detection of systematic error. sidiary arrangements of these quantities were made both in R.A. and N.P.D., and the results are shown in the following tables.